

## Abstract

A semiconductor chip which does not increase the thickness or the board area of a semiconductor device wherein semiconductor chips are layered and does not increase the wire length between the semiconductor chips even in the case that a plurality of semiconductor chips are layered on a wiring board and a process thereof, as well as a semiconductor device, and the like, are provided.

The semiconductor chip has a semiconductor substrate 13, first external electrodes 21 formed on the first surface 14 of the semiconductor substrate 13, second external electrodes 22 formed on the second surface 17 of the semiconductor substrate 13 and through holes 16 created in the semiconductor substrate 13, wherein the through holes 16 are provided in the inclined planes 15 formed so that the inner angles made up of the second surface 17 and the inclined planes 15 are obtuse angles and the first external electrodes 21 and the second external electrodes 22 are electrically connected through conductive patterns 19 formed so as to follow the inner walls of the through holes 16 and the inclined planes 15.